



Occurrence Details

Occurrence Number: 105F 093

Occurrence Name: Higrade

Occurrence Type: Hard-rock

Status: Prospect

Date printed: 12/16/2025 7:48:55 AM

General Information

Primary Commodities: gold, lead, silver, zinc

Aliases: Groundhog, Lorne

Deposit Type(s): Sediment hosted Sedimentary Exhalative Zn-Pb-Ag (Sedex)

Location(s): 61°36'15" N - -132°51'10" W

NTS Mapsheet(s): 105F10

Location Comments: .5 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Staked as Jeff cl 1-4 (YA45703) in Aug/79 by Pete & Harry Verslucce, who prospected and sampled in 1980. N. Hennel staked a single Hi Grade claim (YA45137) on the east side of the Jeff claims at about the same time. An unknown person tied on Jim cl 1-2, to the south in Sep/79.

The Seagull Joint Venture (Great Western Petroleum Corporation & Lornex Mining Corporation) tied on Lorne cl 1-55 (YA58134) to the north, in Apr/81 to cover a GSC geochemical anomaly. The joint venture group performed mapping and geochemical sampling later in the year.

In May/86, Yukon Minerals Corporation optioned the Hi Grade and Jeff claims and surrounded them with HV cl 1-348 (YA99558). The company performed hand trenching later in the year. In 1987 Yukon Minerals joint ventured with Perrex Resources Ltd and in Mar/87 they staked MPR cl 1-152 (YB00020) to the south. Later in the year the group carried out geological mapping and hand and bulldozer trenching.

In 1988 Yukon Minerals and Perrex continued geological mapping, prospecting and bulldozer and backhoe trenching programs on the MPR claims. On the Jeff claims Yukon Minerals drilled 6 diamond drill holes (204 m). The company also collected an 18.81 tonne bulk sample from the Hi Grade occurrence (this occurrence), which was shipped to the smelter in Trail, British Columbia. Yukon Minerals continued prospecting and mapping in 1989, and conducted further trenching in 1990.

Restaked as Pete cl 1-5 (YB59278) by Apr/95 by R. Berdahl. B. Kreft staked Rob cl 1 (YB60943) 3 km to the south in Aug/95 and explored the claim with hand trenching and rock sampling. In Sept/95 Kreft staked Rob cl 2 (YB61380) 1.5 km to the south and Rob cl 3 (YB61471) 2 km to the northwest. In Oct/95 T. Arsenault staked Fuss cl 1 (YB70838) on the east side and Fuss cl 2 (YB70839) on the west side of Rob claim 3.

In Jun/2000, A. Bordeleau restaked a portion of Berdahl's expired Pete claim block, with a single Pete claim (YB92702).

Claims overlying the occurrence were restaked in late 2007 by Strategic Metals Ltd. Rockhaven bought the property from Strategic in November 2008. Rockhaven performed prospecting and soil sampling over the property in 2009.

Capsule Geology

The occurrence is located southwest of the Tintina Fault Zone in the Cassiar Terrane (Platform). The Cassiar Terrane is a curvilinear shelf which formed, between mid-Cambrian to Silurian time, roughly parallel to the western edge of the North American craton, but separated from it by the Selwyn Basin. Shallow water deposition on the platform continued until Late Devonian time. Block faulting and local uplift during the Late Devonian and Mississippian resulted in deposition of carbonaceous shale, chert pebble conglomerate and local felsic igneous activity in the Selwyn Basin and across the Cassiar Terrane.

The Ketza-Seagull district is underlain by thick (400 m or greater) successions of predominantly calcareous sedimentary rocks, with lesser clastic sediments and volcanic rocks, ranging in age from lower Cambrian to Mississippian. Fault structures within the calcareous units are host to veins containing argentiferous galena and gold rich mantos. The latter occur below an unconformity within lower Cambrian limestone and the former occur throughout the calcareous members above the unconformity. Fonseca (1998) attributes the Ketza (Minfile Occurrence #105F 019) gold rich manto, magnetite-gold skarns and oxide gold occurrences and deposits to mineralizing fluids ascending D4 extensional event structures. A similar event, possibly associated with the Seagull Uplift, may be responsible for mineralized structures in the Seagull Creek area (this occurrence area). The source for the fluids is unknown. The only igneous rocks exposed in the immediate area are Mississippian age volcanic and intrusive rocks which have no spatial association with the ore bodies (Abbott, 1986). A small, mid- Cretaceous stock is exposed in the central portions of the Seagull Uplift and the area is cut by numerous mafic dykes. There is sufficient evidence to suggest mid-Cretaceous intrusions sit unexposed beneath the Ketza-Seagull Arch which may have provided the structural extension - uplift and heat source for driving the mineralizing fluids.

Most mineral occurrences found in the Seagull Lakes area consist of northerly trending Ag-Pb-Zn bearing veins and breccias hosted by Silurian-Devonian dolomite. Despite its name the Higrade occurrence is actually located on the former Jeff claims. Abbott (1986) on his map of the area labelled the Higrade occurrence the 'Lorne' (#100), while Yukon Minerals referred to it as the Jill occurrence. Abbott reported that galena is found in boulders of massive sulphide float up to 30 cm across, in narrow fracture fillings, and as blebs up to 3 cm across in dolomite. The occurrence consists of three north striking veins dipping 55 degrees east. The main showing has a vein width which varies but seldom exceeds 30 cm. A 3 m chip sample by Yukon Minerals in 1986 assayed 3 723.3 g/t Ag, while specimens assayed in 1987 returned up to 11 828.3 g/t Ag and 71.8% Pb. The best result from the 1988 diamond drilling was 512.6 g/t Ag, 9.78 % Pb, 9.55 % Zn, 341 ppb Au and 0.19% Cu (Fowler, 1988) from a limonite (70%)-dolomite core rubble.

Exploration work completed by Yukon Minerals on the Jeff claims as part of their HV property, outlined the PN and Lucky-MF zones, located approximately 450 m northeast of this occurrence. The PN zone is a series of narrow anastomosing galena veins where Yukon Minerals blocked out 3 157 tonnes of drill-indicated and probable reserves grading 471.08 g/t Ag, 9.90% Pb and 5.25% Zn. The zone averages less than 50 cm wide but has been traced on surface for over 35 m and has been drill tested to a depth of 22 m below surface. The veins consist of 70-90% galena, 5-20% freibergite, up to 3% chalcopryrite, up to 5% pyrite, 5-20% limonite and minor sphalerite. Moderate sericitization and silicification extends up to 1 metre into the wallrock. The Lucky-MF zone is a similar vein fault, located 150 m east of the PN zone with reserves calculated at 7 954 tonnes grading 186.86 g/t Ag, 3.40% Pb, 5.22% Zn and 0.14 g/t Au.

On the MPR claims nine mineralized zones were identified and explored. Three types of mineralization are described by Davidson (1988) and Nicholson (1989); stratiform type, hydrothermal Ag-Pb-Zn veins and replacements in carbonates and Au-Ag-As mineralization in the phyllites (JT zone). At the Geo zone, a Cambrian phyllite hosts banded galena, sphalerite and chalcopryrite in a siliceous barite horizon over a width of 3 m and a strike length of 400 m (Nicholson, 1989). Rock samples from the HO zone, on the MPR claims, averaged 839.9 g/t Ag, 21.1% Pb and 5.2% Zn. (Nicholson, 1989). A grab sample from the SP zone yielded 1 714 g/t Ag and 71.5% Pb (Davidson, 1988).

Exploration work in 1990 by Yukon Minerals on the HV property, outlined the Otter zone, located approximately 2 km to the southwest. The Otter zone is a galena-bearing dolomite breccia exposed in Trench 90-G (located at the junction of HV cl 18, and MPR cls 110 and 112). A 1.5 m chip sample across this zone returned 16.5% Pb, 0.99% Zn and 95 g/t Ag.

In 1988, a 52.56 tonne bulk sample from the PN zone was shipped to the smelter in Trail BC. It reportedly returned grades of 4 106.7 g/t Ag, 0.07% Cu, 5.46% Pb and 3.45% Zn. Composite samples collected by Berdahl in 1995, from approximately 12 tons of previously bagged hand cobbled high-grade material stored at the Higrade occurrence (now staked within the Pete claims) returned an average grade of 3 755 g/t Ag, 1.25% Cu, 66.9% Pb, and 0.48% Zn (Berdahl, May/96).

Kreft (1995) explored the Rob 1 and Rob 2 claims and successfully located new NW trending galena-tetrahedrite veins carrying sub-economic grades of silver (Kreft, Mar/96a, Kreft Mar/96b).

Rockhaven identified a broad anomalous zone of gold and arsenic in soils on the property, which they named the Aztek zone. The anomalous zone is 2000 m by 1400 m and assays 25 to 327 ppb Au and 77 to 1940 ppm As over a dolomite unit. Grab samples of limonitic dolomite rubble within the zone assayed up to 1.81 g/t Au, 486 g/t Ag, 14.9% Pb and 0.75% Zn.

References

ALBERTA STOCK EXCHANGE, 1989. News Release.

BERDAHL, R.S., May/96. Assessment Report #093466 by R.S. Berdahl.

GEORGE CROSS NEWSLETTER, 26 Jul/90.

GREAT WESTERN PETROLEUM CORPORATION, Dec/81. Assessment Report #090979 by L.K. Eccles.

KREFT, B., 1996a. Assessment Report #093395 by B. Kreft.

KREFT, B., 1996b. Assessment Report #093396 by B. Kreft.

KREFT, B., Feb/96. Assessment Report *#093397 by B. Kreft.

ROCKHAVEN RESOURCES LTD., News Release, 30 Nov 2009.

YUKON MINERALS CORPORATION, Jun/87. Prospectus, p. 12.

YUKON MINERALS CORPORATION, Feb/88. Assessment Report #092124 by G.S. Davidson.

YUKON MINERALS CORPORATION, Nov/88. Assessment Report #092097 by G.S. Davidson.

YUKON MINERALS CORPORATION, 1988. Assessment Report #092539 by B. Fowler.

YUKON MINERALS CORPORATION, Jan/89. Assessment Report #092658 by G. Nicholson.

YUKON MINERALS CORPORATION, Jan/91. Assessment Report *#092907 by G.S. Davidson.

YUKON MINERALS CORPORATION and PERREX RESOURCES LTD, Dec/88. Assessment Report #093042 by B.P. Fowler.

YUKON EXPLORATION 1987, p. 156; 1989, p. 44.

YUKON EXPLORATION & GEOLOGY 1981, p. 130.

YUKON MINING & EXPLORATION OVERVIEW 1988, p. 23-24.

Work History

Date	Work Type	Comment
6/1/2020	Geochemistry	
6/1/2020	Geology	
6/1/2020	Geochemistry	
6/1/2010	Trenching	
6/1/2010	Geochemistry	
6/1/2010	Geology	
6/1/2010	Geochemistry	
6/1/2009	Geology	
6/1/2009	Other	
6/1/2008	Geochemistry	
6/1/2008	Geology	
6/1/2008	Geochemistry	
6/1/2008	Airborne Geophysics	
6/1/2008	Airborne Geophysics	
6/1/1995	Trenching	
6/1/1995	Geochemistry	
6/1/1988	Airphotography	
6/1/1988	Ground Geophysics	
6/1/1987	Geochemistry	
6/1/1987	Ground Geophysics	
6/1/1987	Ground Geophysics	
6/1/1987	Ground Geophysics	
6/1/1981	Geochemistry	
12/31/2009	Geochemistry	

12/31/1995	Geochemistry	Both Berdahl and Kreft collected rock samples from their respective claims.
12/31/1990	Trenching	
12/31/1989	Geology	Worked performed by Yukon Minerals on MPR claims.
12/31/1989	Other	Worked performed by Yukon Minerals on MPR claims.
12/31/1988	Geochemistry	Amount of work done: 18.81 TONNES Sample shipped to Trail, B.C.
12/31/1988	Drilling	Number of holes drilled: 6 Amount of work done: 204 METRES
12/31/1988	Geology	
12/31/1988	Trenching	
12/31/1988	Other	
12/31/1987	Geology	
12/31/1987	Trenching	
12/31/1987	Trenching	
12/31/1986	Trenching	
12/31/1981	Geology	
12/31/1981	Geochemistry	
12/31/1981	Geochemistry	
12/31/1981	Other	
12/31/1980	Other	
12/31/1980	Other	

Assessment Reports that overlap occurrence					
Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
095171	2010	Assessment Report Describing Geological Mapping, Prospecting, Hand Trenching and Geochemical Sampling at the Groundhog Property	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Backhoe - Trenching		
095104	2008	General Mapping, Prospecting, Geochemical Sampling and Geophysical Surveys at the Groundhog Property	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Rock - Geochemistry, Silt - Geochemistry, Bedrock Mapping - Geology		
093395	1995	Assessment Report on Rob #1 Mineral Claim	Rock - Geochemistry, Backhoe - Trenching		
093466	1995	General Prospecting Report on the Highgrade Property	Rock - Geochemistry, Soil - Geochemistry		
093396	1995	Assessment Report on Rob #2 Mineral Claim	Rock - Geochemistry, Backhoe - Trenching		
093397	1995	Assessment Report on Rob #3 Mineral Claim	Rock - Geochemistry, Backhoe - Trenching		
093042	1988	Ketza Project 1988 Regional Program	Diamond - Drilling, Diamond - Drilling, Rock - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Soil - Geochemistry, Water - Geochemistry, Bedrock Mapping - Geology, Detailed Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, EM - Ground Geophysics, Prospecting - Other, Surveying - Other, Photogrammetry - Remote Sensing, Resource Estimate - Studies, Backhoe - Trenching, Backhoe - Trenching, Mechanical - Trenching	90	4572
092539	1988	Diamond drilling on the Ketza Project	Diamond - Drilling, Rock - Geochemistry, Bedrock Mapping - Geology, Backhoe - Trenching	45	2286
092096	1987	Geological, Geochemical & Geophysical Report on the Ram 1-178 & Mat 1-12 Mineral Claims	Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, IP - Ground Geophysics, Magnetics - Ground Geophysics		
090979	1981	Geochemical Report on the Lorne Claims (Lorne Group)	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry		

Related References				
Number	Title	Page(s)	Reference Type	Document Type
ARMC001806	Area A maps - Ketza project		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC001807	Area B maps - Ketza project		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC001808	Area C maps- Ketza project		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC004447	Map collection - Ketza project - Area A		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC004	Map collection - Ketza project - Area B		Property File Collection	Geoscience Map (Geological -

448	Map collection - Ketza project - Area B	Property File Collection	Bedrock)
ARMC004 449	Map collection - Ketza project - Area C	Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC004 957	Map showing location of Tet, Rio and Cone claims - Ketza River area	Property File Collection	Geoscience Map (General)
ARMC004 958	Report on progress of exploration - Cone group	Property File Collection	Report
ARMC004 959	Assay certificate - Cone group	Property File Collection	Assays
ARMC004 960	Report on programme of Pelly Minerals syndicate	Property File Collection	Report
ARMC004 961	Notes and sketch map on the Pelly Minerals project	Property File Collection	Miscellaneous Company Documents
ARMC004 962	Correspondence Re: Pelly Mineral syndicate properties	Property File Collection	Miscellaneous Company Documents
ARMC008 864	Combined progress reports for November and December, 1966	Property File Collection	News Release
ARMC008 865	Correspondence Re: Ketza claims - Silver Key Mines	Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC008 866	Correspondence and sketch maps Re: Stump Mines Ltd. - Silver Key Mines - Ketza River project	Property File Collection	Miscellaneous Company Documents
ARMC008 867	Map - Ketza River project - Ross River area, Yukon	Property File Collection	Miscellaneous Company Documents
ARMC008 868	News clippings: Pelly mineral syndicate	Property File Collection	Geoscience Map (General)
ARMC008 869	Correspondence Re: Pelly River properties	Property File Collection	Miscellaneous Company Documents
ARMC008 870	Correspondence Re: Pelly River properties - Dr. Aho	Property File Collection	Miscellaneous Company Documents
ARMC008 871	Assay certificate - Pelly minerals venture	Property File Collection	Assays
ARMC008 872	Assay certificate - Pelly minerals	Property File Collection	Assays
ARMC008 873	Correspondence Re: Pelly minerals project	Property File Collection	Miscellaneous Company Documents
ARMC008 874	Notes - Pelly minerals project	Property File Collection	Miscellaneous Company Documents
ARMC008 875	Notes - Pelly minerals	Property File Collection	Miscellaneous Company Documents
ARMC008 876	Report on progress of exploration - Pelly Minerals project	Property File Collection	Report
ARMC008 877	Report on progress of exploration - Pelly Minerals project	Property File Collection	Report
ARMC008 878	Report on progress of exploration - Pelly Minerals project	Property File Collection	Report
ARMC008 879	Correspondence Re: Pelly minerals project	Property File Collection	Miscellaneous Company Documents
ARMC008 880	Map showing location of Tet, Rio and Cone claims - Ketza River area	Property File Collection	Geoscience Map (General)
ARMC008 881	Report on programme of Pelly Minerals Syndicate	Property File Collection	Report
ARMC008 882	Map - Cone No. 1 mineral claim	Property File Collection	Geoscience Map (General)
ARMC008 883	Correspondence Re: Pelly River project	Property File Collection	Miscellaneous Company Documents
ARMC008 885	Correspondence Re: Acquired claim groups - Pelly River project	Property File Collection	Miscellaneous Company Documents
09-161	Assessment Report describing Geological Mapping, Prospecting, Hand Trenching and Geochemical Sampling at the Groundhog Property	Yukon Government: Energy, Mines and Resources	YMEP Report
95-017	Summary of 6 Prospecting Trips to Groundhog Creek, Rain Claims, Cody\Ruby, Stewart River and Rancheria Areas	Yukon Government: Energy, Mines and Resources	YMEP Report
88-006	Ketza Project 1988 Regional Program	Yukon Government: Energy, Mines and Resources	YMEP Report
87-018	1987 Geological, Geochemical & Geophysical Report on the Ram 1-758 & Mat 1-12 Mineral Claims	Yukon Government: Energy, Mines and Resources	YMEP Report

Year	Zone	Type	Commodity	Grade	Tonnage	Amount	Reported Amount	43-101 Compliant	Cut-off
1988	HIGRADE - LUCKY-MF ZONE RESERVES (UNDERGROUND)	Historical Estimate	gold	.14 g/t	7,954	1113.56	No	No	Unknown
Company labeled these reserves probable, possible and drill indicated. Does not meet National Instrument 43-101 standards. Calculated from surface sampling and 6 drill holes. In Report on 1988 Exploration Program Ketza Project, Yukon Minerals -Perrex Resources Joint Venture. YEIP 88-006, Volume 2, p. 36. Available in EMR Library.									
1988	HIGRADE - LUCKY-MF ZONE RESERVES (UNDERGROUND)	Historical Estimate	lead	3.4 %	7,954		No	No	Unknown
Company labeled these reserves probable, possible and drill indicated. Does not meet National Instrument 43-101 standards. Calculated from surface sampling and 6 drill holes. In Report on 1988 Exploration Program Ketza Project, Yukon Minerals -Perrex Resources Joint Venture. YEIP 88-006, Volume 2, p. 36. Available in EMR Library.									
1988	HIGRADE - PN ZONE RESERVES (UNDERGROUND)	Historical Estimate	lead	9.9 %	3,157		No	No	Unknown
Company labeled these reserves probable and drill indicated. Does not meet National Instrument 43-101 standards. Calculated from surface sampling and 6 drill holes. Diluted to a minimum mining width of 1.22 m. In Report on 1988 Exploration Program Ketza Project, Yukon Minerals -Perrex Resources Joint Venture. YEIP 88-006, Volume 2, p. 33. Available in EMR Library.									
1988	HIGRADE - LUCKY-MF ZONE RESERVES (UNDERGROUND)	Historical Estimate	silver	186.86 g/t	7,954	1486284.44	No	No	Unknown
Company labeled these reserves probable, possible and drill indicated. Does not meet National Instrument 43-101 standards. Calculated from surface sampling and 6 drill holes. In Report on 1988 Exploration Program Ketza Project, Yukon Minerals -Perrex Resources Joint Venture. YEIP 88-006, Volume 2, p. 36. Available in EMR Library.									
1988	HIGRADE - PN ZONE RESERVES (UNDERGROUND)	Historical Estimate	silver	471.08 g/t	3,157	1487199.56	No	No	Unknown
Company labeled these reserves probable and drill indicated. Does not meet National Instrument 43-101 standards. Calculated from surface sampling and 6 drill holes. Diluted to a minimum mining width of 1.22 m. In Report on 1988 Exploration Program Ketza Project, Yukon Minerals -Perrex Resources Joint Venture. YEIP 88-006, Volume 2, p. 33. Available in EMR Library.									
1988	HIGRADE - LUCKY-MF ZONE RESERVES (UNDERGROUND)	Historical Estimate	zinc	5.22 %	7,954		No	No	Unknown
Company labeled these reserves probable, possible and drill indicated. Does not meet National Instrument 43-101 standards. Calculated from surface sampling and 6 drill holes. In Report on 1988 Exploration Program Ketza Project, Yukon Minerals -Perrex Resources Joint Venture. YEIP 88-006, Volume 2, p. 36. Available in EMR Library.									
1988	HIGRADE - PN ZONE RESERVES (UNDERGROUND)	Historical Estimate	zinc	5.25 %	3,157		No	No	Unknown
Company labeled these reserves probable and drill indicated. Does not meet National Instrument 43-101 standards. Calculated from surface sampling and 6 drill holes. Diluted to a minimum mining width of 1.22 m. In Report on 1988 Exploration Program Ketza Project, Yukon Minerals -Perrex Resources Joint Venture. YEIP 88-006, Volume 2, p. 33. Available in EMR Library.									